

# **Mount Biedeman**

*CA-010-095*

MT. BIEDEMAN WILDERNESS STUDY AREA (WSA)

(CA-010-095)

1. THE STUDY AREA — 13,146 acres

The Mt. Biedeman WSA is located in northeastern Mono County, approximately nine miles southeast of Bridgeport, California. The WSA includes 13,069 acres of Bureau of Land Management (BLM) land, 77 acres of private inholdings, and no State land (see Map 1 and Table 1).

The northern boundary of the WSA follows the Bodie Road (State Highway 270) and non-public land northeast to Cottonwood Canyon Road. It follows this road south and then proceeds cross-country skirting the edge of an old mining area. It rejoins Cottonwood Canyon Road and a 60 kV powerline right-of-way south of Sugarloaf Mountain. The eastern boundary continues south and turns west following an irregular pattern of private land until it meets Bridgeport Canyon County Road. The boundary proceeds northwest along Bridgeport Canyon Road to private land in Mormon Meadow and then intersects with Bodie Road.

The WSA occupies the southwestern portion of the Bodie Hills, which lie along the western edge of the Basin and Range geomorphic province. The WSA is dominated by steep, rocky, and rounded volcanic hills with summit elevations ranging from approximately 8,000 to 9,022 feet. Mt. Biedeman, a rounded, brush-covered mountain (8,981 feet), and two adjoining mountains occupy the central portion of the WSA, while an arc of pinyon-juniper-covered hills and interspersed canyons ring the southern periphery of the WSA. A few drainages dissect the northeastern portion of the WSA. A few springs with associated meadows visually contrast with the surrounding arid environment. The WSA provides picturesque panoramic vistas of Mono Lake and the eastern Sierra, primarily from the southern portion of the unit. Vegetation in the WSA consists of pinyon-juniper associations located along the unit's southern boundary and a dense understory of shrubs which is uniformly located throughout the unit. Perennial grasses inhabit the meadow areas.

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA). Various suitability recommendations were analyzed in the Draft and Final Environmental Impact Statements (EIS) for the Benton-Owens Valley/Bodie-Coleville Wilderness Study Areas. A summary of the area's wilderness values was included in the Final EIS. Three different suitability recommendations were analyzed in the EIS: all wilderness, partial wilderness recommending approximately 71% of the area suitable, and no wilderness.

2. <u>RECOMMENDATION AND RATIONALE</u> —	0	acres recommended for wilderness
	13,069	BLM acres recommended for non-wilderness

No wilderness is the recommendation for this WSA. The entire acreage in this WSA is released for uses other than wilderness. The all-wilderness alternative is considered to be the environmentally preferred alternative as it would result in the least change from the natural environment over the long term. The no-wilderness alternative will be implemented in a manner which will use all practical means to avoid or minimize environmental impacts.

The WSA is recommended non-suitable because its potential for mineral occurrence, motorized recreation, Bodie State Historic Park facility development, and potential emergency realignment needs for the adjoining State Highway 270 outweigh the area's marginal wilderness values. Manageability was an additional consideration in the non-suitable recommendation. Within this WSA, overall wilderness values are considered low in quality due to the lack of significant wilderness features unique to the region.

Resource conflicts in the WSA include high potential for metallic minerals in the northeastern and western portions of the WSA. This area contains 30 mining claims with moderate to high probability for valid existing rights. Development of mining claims which are found to have valid existing rights could impair the area's wilderness values with or without wilderness designation. The WSA also contains moderate to high potential for geothermal resources. Geothermal lease applications are pending along the WSA's northern boundary.

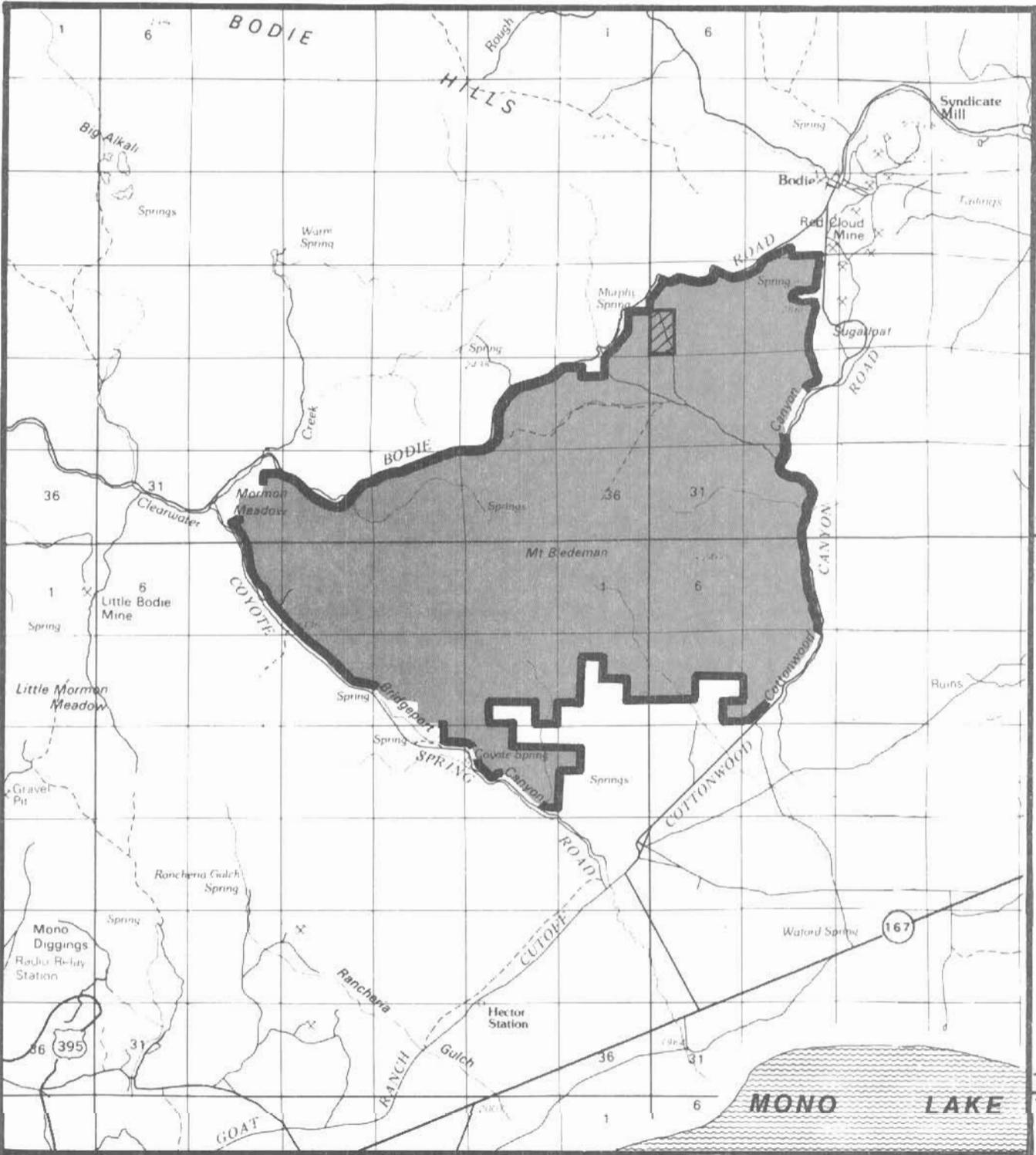
The WSA provides some opportunities for motorized recreational use. Approximately ten miles of primitive vehicle routes are located in the WSA. These routes are used primarily by hunters and sightseers in the non-winter season, and local snowmobilers during winter months. Recreation use is expected to remain stable.

Bodie State Historic Park lies just outside the WSA and the Bodie State Historic Park Management Plan prescribes administrative facilities to be constructed in the northeastern portion of the WSA. These include an interpretive center, a 40-car parking lot, a dormitory, a park office, two residences, and one mile of new road.

State Highway 270 is the northern boundary of the WSA. This paved road is used regularly and frequently by tourists who visit Bodie State Historic Park. Under emergency conditions such as flash flooding or road washouts, it could be necessary to reroute State Highway 270 up to 200 feet into the WSA.

The WSA's lack of natural barriers along portions of its boundaries and the potential for mining claim development in areas of high mineral value would make the WSA difficult to manage as wilderness.

The WSA contains wilderness values which are not considered significant or unique to the area. As a result, wilderness values are considered low and would provide little or no significant enhancement to the National Wilderness Preservation System.



T4N  
T3N

T3N  
T2N

R25E R26E

R26E R27E

NONE

RECOMMENDED FOR WILDERNESS

SPLIT ESTATE

STATE

RECOMMENDED FOR NONWILDERNESS

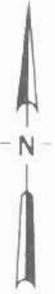
STATE

STATE

LAND OUTSIDE WSA RECOMMENDED FOR WILDERNESS

PRIVATE

PRIVATE



**Mt. Biedeman  
Proposal  
MAP-1**



010-095  
JUNE, 1988

TABLE 1 - Land Status and Acreage Summary of the Study Area

<u>Within Wilderness Study Area</u>		<u>Acres</u>
BLM	(surface and subsurface)	13,069
Split Estate	(BLM surface only)	0
Inholdings		
	State	0
	Private	77
Total		<u>13,146</u>
<u>Within the Recommended Wilderness Study Boundary</u>		<u>Acres</u>
BLM	(within WSA)	0
BLM	(outside WSA)	0
Split Estate	(within WSA)	0
Split Estate	(outside WSA)	0
Total BLM Land Recommended for Wilderness		<u>0</u>
Inholdings		
	State	0
	Private	0
<u>Within the Area Not Recommended for Wilderness</u>		<u>Acres</u>
BLM	(surface and subsurface)	13,069
Split Estate	(BLM surface only)	0
Total BLM Land Not Recommended for Wilderness		<u>13,069</u>

3. CRITERIA CONSIDERED IN DEVELOPING THE WILDERNESS RECOMMENDATIONS

A. Wilderness Characteristics

1. Naturalness: The WSA's natural values have been maintained. The few man-made imprints in the area are generally unnoticeable. The WSA consists of volcanic hills, rocky knobs, broad meadows, and some ephemeral drainages. Most of the WSA is covered by big sagebrush, bitterbrush, and perennial grasses. Plant density is high. Low sage is found on ridges, and as interspersed islands within the big sagebrush type. A stand of pinyon trees is located along the WSA's southern boundary. The unit also contains isolated aspen groves.

The WSA's terrain, dense vegetation and size renders man-made imprints to a low level of visual contrast. These imprints include approximately 10 miles of primitive vehicle routes, a few reservoirs, pipelines, and a cherrystemmed road in the northeastern corner of the WSA. This road leads to some mining claims.

Livestock over-utilization in some wetland areas has resulted in site degradation. In addition, a wildfire in 1984 burned 150-200 acres northeastern of Coyote Spring.

2. Solitude: There are outstanding opportunities for solitude throughout the WSA. The rugged hills, scenic quality, and natural character of the unit provide area visitors with a sense of isolation and the opportunity to attain unconfined freedom of movement. The outside influences of vehicle use on State Highway 270, which forms the northern boundary of the WSA, impair solitude along the WSA's edge.

This WSA is periodically overflowed by military aircraft as part of the national defense mission taking place in approved military operating areas and flight corridors. The visual intrusions and associated noise create periodic temporary effects on solitude which are deemed necessary and acceptable as a part of the defense preparedness of the nation.

3. Primitive and unconfined recreation: Outstanding opportunities for primitive and unconfined types of recreation are widely available in the WSA. These opportunities include hunting, backpacking, camping, nature appreciation, scenic photography, etc.
4. Special features: The WSA contains some special features including a population of Phacelia monoensis, which is on the United States Fish and Wildlife candidate species list.

In addition, the WSA includes several wildlife species such as sage grouse, a recovering species of game birds that has been historically over-harvested; mule deer and pronghorn antelope which rely on this intact natural environment for their forage and cover.

The WSA serves as crucial nesting habitat for sage grouse as well as a crucial deer fawning area. These game animals rely on the unit's natural cover for nesting and fawning.

B. Diversity in the National Wilderness Preservation System (NWPS)

1. Assessing the diversity of natural systems and features as represented by ecosystems: This WSA contains 13,069 acres of the Intermountain Sagebrush/Great Basin Sagebrush ecosystem. The Mt. Biedeman WSA would not increase the diversity of the types of ecosystems represented in the NWPS.

Table 2 - Ecosystem Representation

Bailey-Kuchler Classification Domain/Province/PNV	<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
	areas	acres	areas	acres
<u>NATIONWIDE</u>				
Intermountain Sagebrush/ Great Basin Sagebrush	1	32,407	55	1,192,206
<u>CALIFORNIA</u>				
Intermountain Sagebrush/ Great Basin Sagebrush	0	0	19	207,740

2. Expanding the opportunities for solitude or primitive recreation within a day's driving time (five hours) of major population centers: The WSA is within a five-hour drive of nine major population centers. Table 3 summarizes the number and acreage of designated areas and other BLM study areas within a five-hour drive of the population centers.

Table 3 - Wilderness Opportunities for Residents of Major Population Centers

Population Centers	<u>NWPS Areas</u>		<u>Other BLM Studies</u>	
	areas	acres	areas	acres
<u>California</u>				
Chico	16	1,286,873	13	430,822
Fresno	35	4,048,852	28	460,790
Merced	33	3,957,550	25	348,753
Modesto	36	4,126,963	81	1,722,326
Sacramento	46	5,001,817	87	2,479,541
Stockton	35	4,061,833	46	601,496
Vallejo-Napa-Fairfield	44	4,832,667	74	2,100,862
Yuba City	44	4,951,805	85	2,495,500
<u>Nevada</u>				
Reno	39	4,647,230	170	6,904,809

3. Balancing the geographic distribution of wilderness areas: The WSA is within 50 air miles of one BLM WSA recommended for wilderness designation. The Hoover Wilderness, 15 miles to the west, is the nearest designated wilderness area. This wilderness area is administered by the Toiyabe and the Inyo National Forests. Other nearby designated wilderness areas include Yosemite National Park

which is managed by the National Park Service, the Ansel Adams Wilderness which is managed by the Inyo National Forest, and the Carson-Iceberg Wilderness which is managed by the Toiyabe National Forest.

C. Manageability

Although the area is manageable as wilderness, it would be difficult due to a lack of easily identifiable boundaries along the southern edge, high metallic mineral potential with numerous mining claims in the northeastern and western portions of the WSA, and a cherrystem mining intrusion allowing motorized vehicle access in the northeastern corner of the unit. The lack of vegetative and topographic barriers along the Bridgeport Canyon and Bodie Roads would make the WSA susceptible to indiscriminate off-highway vehicle use, particularly snowmobiles. Considerable signing, patrolling, and fencing would be required to prevent this use. Constant surveillance would be required to protect the area's wilderness values.

Military overflights in this WSA must be considered to maintain the integrity of the existing and future national defense mission as well as the wilderness resource.

D. Energy and Mineral Resource Values

1. Summary of information known at time of the preliminary suitability recommendation: The Mt. Biedeman WSA is in the Bodie Geology-Energy-Mineral (G-E-M) Resource Area (GRA). An overview of the mineral potential of the WSA is addressed in the Affected Environment section of the Wilderness Recommendations, Benton-Owens Valley/Bodie-Coleville Study Area EIS prepared in 1987. The EIS states that the WSA has a high resource potential for metallic minerals in the northeastern portion and extreme western portion of the WSA and a low resource potential for the remainder of the area. The development potential for metallic minerals in the northeast is high and in the extreme west is moderate. The resource potential for non-metallics and uranium is low. The thorium potential is nil. There is no resource potential for oil and gas. The geothermal resource potential is moderate to high for the entire WSA.

The mineral information in the EIS is supported by the BLM Bodie G-E-M report. This report includes extensive references and personal communications with mining companies active in the area.

The Mt. Biedeman WSA is located on the edge of the Bodie mining district and approximately 12 miles south-southeast of the Masonic mining district. The general area is underlain by Tertiary volcanic rocks of lava flows, plugs, and pyroclastic deposits of principally dacitic composition. Pre-Tertiary metasedimentary rocks overlain by the Tertiary volcanics are exposed in extreme western edge of the WSA. Production of gold and silver in the

mining districts came from several systems of quartz veins. They are closely associated with widespread hydrothermal alteration in the mining districts. This hydrothermal alteration is common in the WSA.

BLM records in 1983 identified approximately 28 mining claims in the high potential areas and a few pending geothermal lease applications along the northern boundary of WSA.

2. Summary of significant new mineral resource data collected since the suitability recommendation which should be considered in the final recommendation: Because this WSA was recommended non-suitable by BLM, no U.S. Geological Survey (USGS) nor U.S. Bureau of Mines (BOM) mineral surveys were conducted in this WSA. No new mineral data in the WSA has become available since the preparation of G-E-M report in 1983. Although California Division of Mines and Geology has a new publication in 1986 on the geology and ore deposits of the Bodie mining district and mining activity news indicated that exploratory/development activities in the surrounding areas of the Masonic mining district and Paramount mine, no additional new mineral data is available in the WSA.

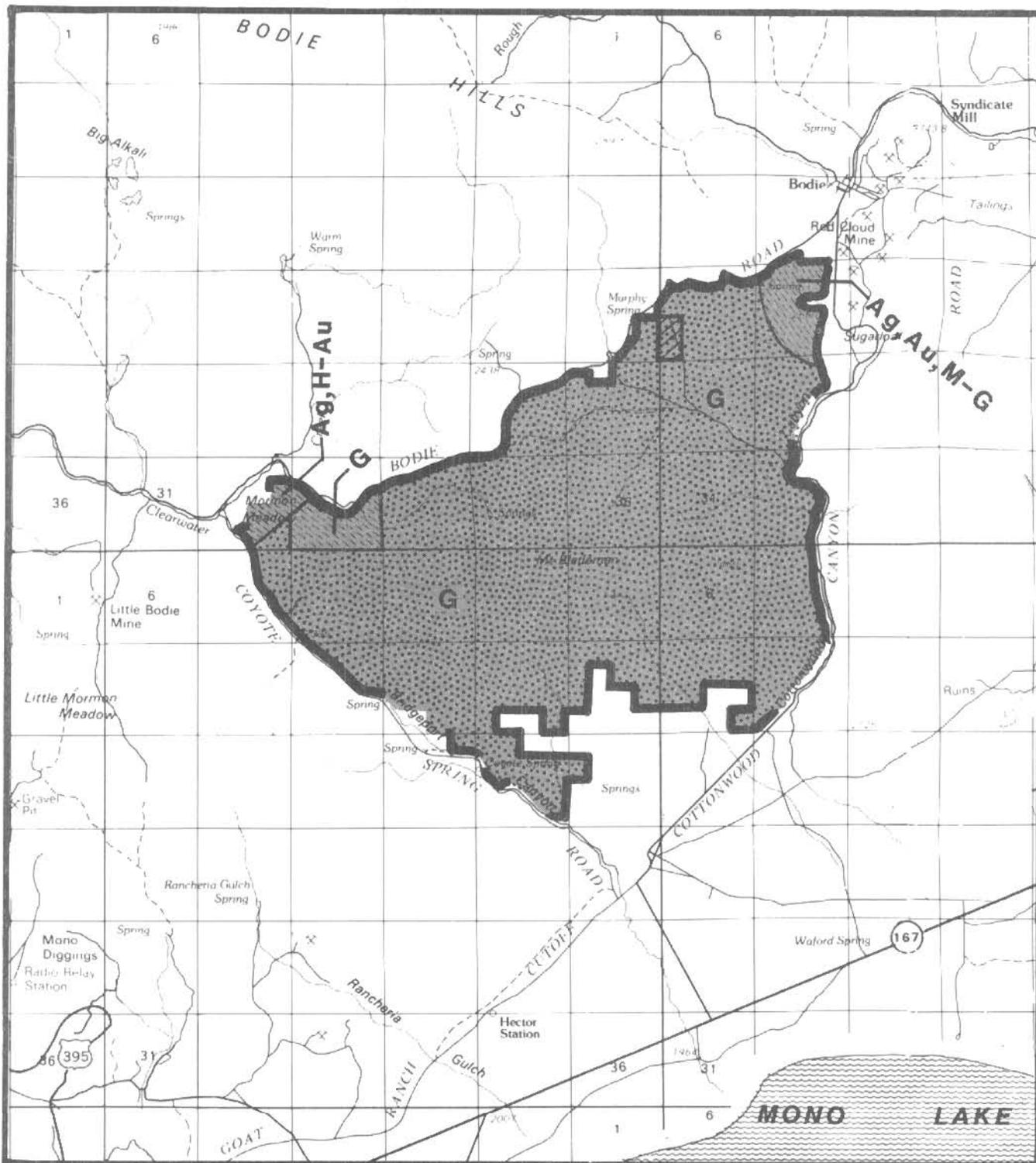
The current BOM's Mineral Industry Location System (MILS) record (May 2, 1988) was examined and the record showed graphite occurrence in sec. 32, T. 4 N., R. 26 E. The occurrence is of no significant economic importance.

Re-examination of the BLM mineral records discloses that sec. 31, T. 4 N., R. 26 E. was classified by the USGS as Bodie Known Geothermal Resources Area (KGRA) (Lands Valuable for Geothermal Resources, unpublished USGS map, updated 1985). There is one pending non-competitive geothermal lease application in the WSA covering 180 acres.

As of March, 1988, BLM records indicate the following distribution of unpatented mining claims in the WSA:

Table 4 - Mining Claims

TYPE	NO.			ACRES		
	SUITABLE	NONSUIT.	TOTAL	SUITABLE	NONSUIT.	TOTAL
<b>Mining Claims</b>						
Lode	0	30	30	0	600	600
Placer	0	0	0	0	0	0
Mill Sites	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>30</b>	<b>30</b>	<b>0</b>	<b>600</b>	<b>600</b>



T4N  
T3N

T3N  
T2N

R25E | R26E

R26E | R27E

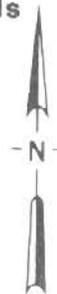
	NONE	Recommended for Wilderness
		Recommended for Non Wilderness
		Land outside WSA Recommended for Wilderness
		Split Estate
		State
		Private

**Explanation**

	High Potential for the Occurrence of Energy and/or Non-energy Minerals
	Moderate Potential for the Occurrence of Energy and/or Non-energy Minerals
<b>M</b>	Moderate Mineral Potential Location in a High Mineral Potential Area
<b>H</b>	High Mineral Potential Location in a Moderate Mineral Potential Area

**Commodity Symbols**

<b>Ag</b>	Silver
<b>Au</b>	Gold
<b>G</b>	Geothermal



**Mt. Biedeman Mineral Resource Potential**



Map-2  
010-095

E. Impacts on Resources

The following table summarizes the effects on pertinent resources for all alternatives considered including designation or non-designation of the entire area as wilderness. (For a full explanation of this summary, refer to the Benton-Owens Valley/Bodie-Coleville Wilderness - Final Environmental Impact Statement.)

Table 5 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
Wilderness Values	Two open-pit mining operations and geothermal development would directly impact naturalness, solitude and primitive and unconfined recreation on 690 acres and impair the perception of naturalness and solitude over an additional 950 acres. Livestock improvement projects would only slightly impair naturalness on a localized basis on less than 5 acres. Special features including crucial sage grouse habitat and sensitive plant ( <i>Phacelia monoensis</i> ) habitat could be moderately impacted from mining activities or development of administrative facilities for Bodie State Historic Park.	Wilderness designation of the entire WSA would result in a slight to moderate enhancement of long-term protection of wilderness values due to prohibition of geothermal development, elimination of 450 visitor days of motorized recreation use, the development of administrative facilities for the Bodie State Historic Park, and the prohibition of emergency realignment of State Route 270 into the WSA. It is anticipated that a determination of valid existing rights would allow development of the two open-pit mines resulting in the same impacts described under the Proposed Action. Livestock improvement projects and grazing would be the same as in the Proposed Action except that vehicle use would be limited resulting in slight beneficial effects.	Wilderness designation of 9,300 acres would result in low positive benefits to the area's wilderness values due to the elimination of 400 visitor-days of motorized recreation use and the reduction of motor vehicle use for livestock grazing activities. A determination of valid existing rights would lead to the development of a 210-acre open-pit mine and locally impact naturalness, solitude, primitive recreation as well as sensitive plant ( <i>Phacelia monoensis</i> ) habitat and crucial sage grouse habitat. The perception of naturalness would be impaired on an additional 350 acres. Livestock improvement projects within the designated portion would only slightly impact naturalness and solitude on a localized basis.  Within the 3,845 acres not designated wilderness, mining and geothermal development would directly impact wilderness values on 480 acres and impair naturalness and solitude over an additional 600 acres. An increase of 100 visitor-days

Table 5 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
Wilderness Values (continued)			of motorized recreation use would result in only minor impacts to naturalness and solitude. Development of administrative facilities for Bodie State Historic Park would moderately impact crucial sage grouse habitat.
Motorized Recreation Use	There would be no impact on motorized recreation use in the WSA. Use would continue and remain stable at 450 visitor-days.	Elimination of motorized recreation use in the WSA would result in a loss of 450 visitor-days. This would only be a minor impact due to the availability of opportunities outside the WSA.	Closure of 9,300 acres of the WSA to motorized recreation use would result in a loss of 400 visitor-days. This would result in only a minor impact due to the availability of opportunities outside the WSA and an increase of 100 visitor-days within the 3,845 acres not designated wilderness.
Recreational Facilities Development	There would be no impact. Administrative facilities for Bodie State Historic Park could be developed within the Bodie Bowl portion of the WSA.	Administrative facilities for the Bodie State Historic Park could not be developed within the WSA. There would be adverse impacts due to limited opportunities outside the WSA.	There would be no impact. Administrative facilities for Bodie State Historic Park could be developed within the Bodie Bowl in the non-designated portion of the WSA.
Geothermal Resource Development	There would be no impacts. The entire WSA would be open for geothermal development including a potential 10-Mw resource.	Wilderness designation would preclude exploration and development of geothermal resources including a 10-Mw resource within the WSA. This would result in less than a minor impact.	Geothermal exploration and development would be precluded on 9,300 acres designated wilderness. However, this would result in a negligible impact due to only a moderate potential for geothermal resources with a low development potential.  There would be no impact on geothermal development within the remaining 3,845 acres. Development of a 10-Mw resource is anticipated.

Table 5 - Comparative Summary of the Impacts by Alternative

ISSUE-RELATED RESOURCES	PROPOSED ACTION (NO-WILDERNESS/NO ACTION)	ALL-WILDERNESS ALTERNATIVE	PARTIAL-WILDERNESS ALTERNATIVE
State Route 270 Realignment	There would be no impacts. Realignment of State Route 270 could occur within the WSA.	Realignment of State Route 270 could not occur within the WSA resulting in a moderate adverse impact.	There would be no impact. The partial-wilderness boundary would establish a 200-foot-wide corridor for realignment of State Route 270.
Sage Grouse Strutting Grounds and Nesting Habitat	There would be a moderate impact as a result of the loss of two separate crucial habitat areas due to mining and the development of administrative facilities for Bodie State Historic Park.	There would be a moderate impact as a result of loss of crucial habitat area due to mining activities. Crucial habitat in the Bodie Bowl would be preserved as a result of prohibiting development of facilities for Bodie State Historic Park.	There would be a moderate impact as a result of the loss of the two separate crucial habitat areas described under the Proposed Action.

F. Local Social and Economic Considerations

No local social or economic considerations were identified in the Final EIS. Therefore, no further discussion of this topic will occur in this document.

G. Summary of WSA - Specific Public Comments

During the inventory phase, a few comments were received addressing the need for utility line expansion and the area's potential for geothermal resources. An additional comment addressed the area's low to moderate mineral potential.

After the inventory, comments were received during the wilderness study process. Two comments supported wilderness designation while another noted the area's use for mineral exploration and development. A similar comment indicated that the area's geothermal leases, private land, structures, and KGRA designation precluded the area's suitability for wilderness.

During the study phase, a public meeting and public hearing were held in association with the draft EIS. The public meeting was held in Markleeville, California, and the public hearing in Bishop, California. Comments were received both orally through the hearing, and in writing during the 90-day public review period. A total of 83 written and oral comments were received. Thirty-three comments supported the Bureau's no-wilderness recommendation. Forty-three comments supported the all-wilderness alternative and seven comments supported the partial-wilderness alternative.

No comments specific to the Mt. Biedeman WSA were received from Federal agencies.

The California Department of Transportation has expressed the potential need for realignment of State Highway 270 (Bodie Road) during reconstruction to meet State Standards.

Mono County provided a comment which noted that the multiple use values and non-public lands of the WSA precluded wilderness designation of the area.